

IAPI Rec'd PCT/PTO 14 APR 2006

FORM PTO-1390 (Modified)  
U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE  
(REV 12-2004)

<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>047084-0137</b>
		U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.53) <b>10/575892</b> Unassigned
INTERNATIONAL APPLICATION NO. PCT/JP2004/015052	INTERNATIONAL FILING DATE 10/13/2004	PRIORITY DATE CLAIMED 10/16/2003
TITLE OF INVENTION COUNTERFLOW HEAT EXCHANGER		
APPLICANT(S) FOR DO/EO/US Mitsuru IWASAKI and Kazunori NAMAI		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau). <input type="checkbox"/> has been communicated by the International Bureau. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <input checked="" type="checkbox"/> is attached hereto. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <input type="checkbox"/> are attached hereto (required only if not transmitted by the International Bureau). <input type="checkbox"/> have been communicated by the International Bureau. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). 10. <input type="checkbox"/> An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).		
Items 11 to 20 below concern other document(s) or information included:		
11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input checked="" type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825 18. <input type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4). 20. <input type="checkbox"/> Other items or information:		

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U.S. APPLICATION NO. (if known, see 37 CFR. 1.5) <b>Unassigned</b> <b>107575892</b>		INTERNATIONAL APPLICATION NO. PCT/JP2004/015052		ATTORNEY'S DOCKET NUMBER 047084-0137	
The following fees have been submitted:					
21. <input checked="" type="checkbox"/>	Basic national fee			\$300	\$ 300.00
22. <input checked="" type="checkbox"/>	Examination fee				
If International preliminary examination report prepared by USPTO and all claims satisfy provisions of PCT Article 33(1)-(4)				\$100	\$ 200.00
All other situations				\$200	
23. <input checked="" type="checkbox"/>	Search fee				
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority				\$100	
International Search Report prepared and provided to the Office				\$400	
All other situations				\$500	\$ 400.00
<b>TOTAL OF ABOVE 21, 22 and 23 =</b>					\$ 900.00
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$ for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)		RATE	
21 - 100 = 0	/50 =	0		x \$250.00	\$ 0.00
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e))					\$ 0.00
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		\$
Total Claims	6 - 20 = 0		x \$ 50.00		\$ 0.00
Independent Claims	1 - 3 = 0		x \$ 200.00		\$ 0.00
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$ 360.00		\$
<b>TOTAL OF ABOVE CALCULATIONS =</b>					\$ 900.00
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					\$ 0.00
<b>SUBTOTAL =</b>					\$ 900.00
Processing fee of 130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).					\$
<b>TOTAL NATIONAL FEE =</b>					\$ 900.00
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). 40.00 per property					\$ 40.00
<b>TOTAL FEES ENCLOSED =</b>					\$ 940.00
					Amount to be refunded:
					charged:
a. <input type="checkbox"/> A check in the amount of \$0.00 to cover the above fees is enclosed.					
b. <input type="checkbox"/> Please charge my Deposit Account No. <u>19-0741</u> in the amount of _____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>19-0741</u> . A duplicate copy of this sheet is enclosed.					
d. <input checked="" type="checkbox"/> Fees are to be charge to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.					
<b>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</b>					
SEND ALL CORRESPONDENCE TO:					
Foley & Lardner LLP					
Customer Number: 22428					
SIGNATURE <u>Pavan K. Agarwal</u>					
NAME <u>40,888</u>					
REGISTRATION NUMBER					